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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,249	05/15/2001	Tetsuya Tamura	14634	9016

23389 7590 04/15/2004

SCULLY SCOTT MURPHY & PRESSER, PC  
400 GARDEN CITY PLAZA  
GARDEN CITY, NY 11530

EXAMINER
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CHEUNG, MARY DA ZHI WANG

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/855,249

Applicant(s)

TAMURA ET AL.

Examiner

Mary Cheung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.7.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Status of the Claims***

1. This action is in response to the application filed on May 15, 2001. Claims 1-13 are pending.

### ***Notes***

2. Claim 13 recites "A program product comprising, computer readable instructions and a recording medium bearing the computer readable instructions; the instructions being adaptable to enable computers to perform a method of ...". This recitation is interpreted as "a program product comprising computer readable instructions embodied in a recording medium that is executable by the computer to perform a method of...".

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as

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opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claim 8 only recites an abstract idea. The recited steps of merely detecting, checking and sending the using state of a product do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to manage the using state of a product over another.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention determines the using state of a product in comparison with a predetermined condition (i.e., useful, concrete, and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 8 is deemed to be directed to non-statutory subject matter.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3-4, 8-9 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Katayanagi et al., U. S. Patent 6,321,983.

As to claim 1, Katayanagi teaches a reuse system comprising (abstract):

a) a host computer which manages using states of products (column 5 lines 4-50 and column 11 lines 19-52 and Figs. 1, 16-17; *specifically, "a host computer" correspond to the recycling/recovery system in Katayanagi's teaching*);

b) a product terminal which is incorporated in a product used by a user and stores using state of units in the product (column 4 lines 58-62 and column 8 lines 33-43 and column 9 lines 51-63), wherein when the using state of the unit satisfies a predetermined condition, the product terminal sends using state information representing that the using state of the unit satisfies the condition to the host computer, and wherein the host computer stores the using state information for each unit and when one of the units is collected after use, the host computer determines whether the unit can be reused or not by referring to the using state information of the corresponding unit (column 5 lines 4-20 and column 5 line 49 – column 6 line 16 and column 11 line 19 – column 12 line 62 and Figs. 16-20).

As to claim 3, Katayanagi teaches the product terminal sends the using state information to the host computer via a computer network (column 3 line 42 – column 4 line 10 and Fig. 1).

As to claim 4, Katayanagi teaches the predetermined condition is defined for at least one of a using state of resource of the unit or product, the number of operation

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times of a function of the product, and an operating time of the product (column 9 lines 51-63).

As to claims 8, 12-13, Katayanagi teaches a method, a recording medium readable by a computer, tangibly embodying a program of instructions executable by the computers to perform a method, and a program product comprising computer readable instructions and a recoding medium bearing the computer readable instructions being adaptable to enable computers to perform a method, of managing using state of product used by a user, the method comprising the steps of (abstract and Figs. 1, 3):

- a) detecting operation or state of units of a product and storing at least one of the number of operation times, the number of operating time, and the state as using state information (column 9 lines 51-63);
- b) checking whether the using state information satisfies a predetermined condition of not (column 12 lines 40-60);
- c) sending, when the using state satisfies the predetermined condition, using state information representing that the using state of the unit satisfies the condition (column 12 lines 40-60).

As to claim 9, Katayanagi teaches the steps are performed in a computer incorporated in the product, and the using state information is sent to another computer external of the product (column 6 lines 39-55 and Fig. 3).

As to claim 11, Katayanagi teaches the using state information is sent from the computer in the product to the other computer via a computer network (column 3 line 42 – column 4 line 10 and Fig. 1).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 2, 5-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katayanagi et al., U. S. Patent 6,321,983 in view of Yamashita et al., U. S. Patent 5,594,529.

As to claim 2, Katayanagi teaches the product terminal sends the using state information to the host computer via a network (column 3 line 42 – column 4 line 10 and Fig. 1). Katayanagi does not specifically teach sending the using state information to

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the host computer via telephone line. However, Yamashita teaches sending information to a host computer via telephone line (column 6 line 66 – column 7 line 1 and Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the teachings of Katayanagi to include the feature of sending information to a host computer via telephone line as taught by Yamashita because this would allow the information to be easily transmitted through this simple telephone line without need of setting up costly system.

As to claim 5, Katayanagi teaches a reuse system comprising (abstract):

- a) a host computer which manages using states of products (column 5 lines 4-50 and column 11 lines 19-52 and Figs. 1, 16-17; *specifically, "a host computer" corresponds to the recycling/recovery system in Katayanagi's teaching*);
- b) a store terminal which sends contract information identifying a user and a product purchased by the user in response to purchase of the product by the user (column 9 lines 11-51 and Figs. 9-11; *specifically, "a store terminal" corresponds to sale management system in Katayanagi's teaching*);
- c) a product terminal which is incorporated in the product and stores using state of units in the product (column 4 lines 58-62 and column 8 lines 33-43 and column 9 lines 51-63), and which when the using state of the unit satisfies a predetermined condition, sends using state information representing that the using state of the unit satisfies the condition to the host computer (column 5 lines 4-20 and column 5 line 49 – column 6 line 16 and column 11 line 19 – column 12 line 62 and Figs. 16-20).



Katayanagi teaches a serial control system (Fig. 2) in contrast to a centralized control system of the present application. Thus, Katayanagi does not specifically teach the store terminal sends the contract information to the host computer (a central computer). However, Yamashita teaches sending information to a centralized host computer (column 6 lines 58-66 and column 10 lines 52-59 and Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the teachings in Katayanagi to be used in a centralized host computer so that all the information among the local terminals can be better collected and analyzed.

As to claim 6, Katayanagi teaches a warehouse terminal which is connected to the host computer and is located in a center where products are kept temporarily to deliver (column 8 lines 44-49 and Figs. 2-3; *specifically, "a warehouse terminal" corresponds to the manufacturer in Katayanagi's teaching*), and wherein the host computer determines units required to be replaced by referring to the contract information and the using state information in a predetermined interval, and informs the warehouse terminal of the units (column 6 line 32-38 and column 11 line 64 – column 13 line 29 and Figs. 2-3).

As to claim 7, Katayanagi teaches a collection center terminal which is connected to the host computer and is located in a center where used products are collected and checked (column 12 lines 11-30 and Figs. 17, 20; *specifically, "a collection center terminal" corresponds to the disposal database in Katayanagi's teaching*), and wherein the contract information further includes a contract duration, and the host computer determines units required to be collected by referring to expiration of a user's contract

from the contract information and the using state information and informs the collection center terminal of the of the units (column 12 lines 31-62 and Figs. 19-20; *specifically, "a contract duration" corresponds to the usage time that is used for determining the part should be recycled or destroyed in Katayanagi's teaching*).

As to claim 10, Katayanagi teaches the using state information is sent from the computer in the product to the other computer via a network (column 3 line 42 – column 4 line 10 and Fig. 1). Katayanagi does not specifically teach sending the using state information via telephone line. However, Yamashita teaches sending information from one computer to another computer via telephone line (column 6 line 66 – column 7 line 1 and Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the teachings of Katayanagi to include the feature of sending information via telephone line as taught by Yamashita because this would allow the information to be easily transmitted through this simple telephone line without need of setting up costly system.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Scheidt et al. (U. S. Patent 5,654,902) discloses recycling of products of complicated structure.

Tani et al. (U. S. Patent 6,529,788) discloses recycle information memory database for storing as recycle information, the information on all reutilizable products, and products currently being used in the market.

Koike (JP 2001318566 A) discloses preventing printing failure by appropriately detecting the life of a process cartridge and informing a user in a printer of a toner reuse-type.

***Inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Cheung whose telephone number is (703)-305-0084. The examiner can normally be reached on Monday – Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(703) 872-9306      (Official Communications; including After Final  
Communications labeled "BOX AF")

(703) 746-5619      (Draft Communications)

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, 7<sup>th</sup> Floor Receptionist.

Mary Cheung  
Patent Examiner  
Art Unit 3621  
April 12, 2004

